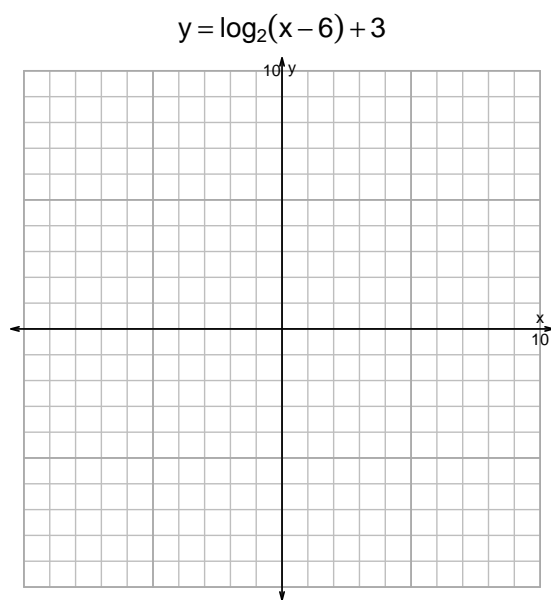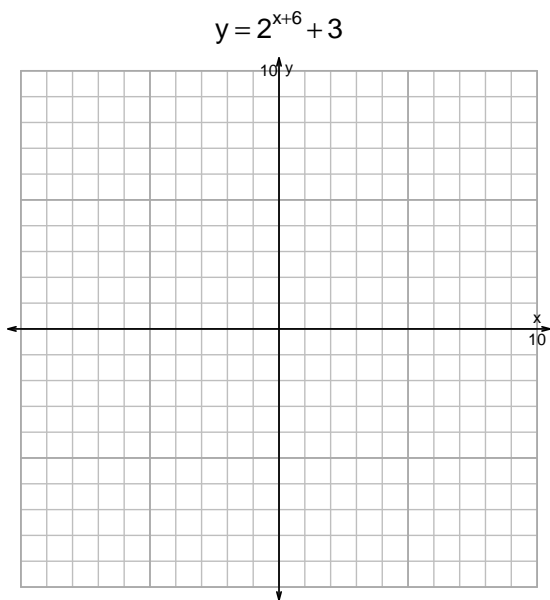Name: _____   Date: _____

s18quiz: EXP LOG (QUIZ v225)

1. Graph $y = 2^{x+6} + 3$ and $y = \log_2(x - 6) + 3$ on the grids below. Also, draw any asymptotes with dotted lines.

$$y = 2^{x+6} + 3$$

$$y = \log_2(x - 6) + 3$$

2. Write (but do not evaluate) the solution to the equation below by writing a logarithmic expression.

$$-11 = \left(\frac{-3}{5}\right) \cdot 2^{-7t/4}$$

3. An exponential function $f(x) = 0.0839 \cdot e^{-1.48x}$ is graphed below on a semi-log plot.

a. Using the plot above, evaluate $f(-1.6)$.

b. Express $f^{-1}(x)$, the inverse of f.

c. Using the plot above, evaluate $f^{-1}(0.04)$.